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first second third fourth congestion switch buff

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Method for prioritizing, selectively discarding, and multiplexing differing traffic type fast ...

MG Hluchyj, A Bhargava, N Yin - US Patent 5,231,633, 1993 - [freepatentsonline.com](#)

... that are served via HOLP with the third and fourth ... data fast packets from a plurality of second sources; ... on an internodal trunk uses a first-in-first-out (FIFO) ...

Cited by 69 - [Related articles](#) - [Web Search](#) - [All 2 versions](#)

Congestion indication/no increase (CI/NI) ABR flow control for ATM switches

GM Depelleau, JE Vincent, A Almuihem - US Patent 6,118,764, 2000 - [freepatentsonline.com](#)

... reserved rate by at least a second predetermined amount ... According to a third broad aspect, the invention provides ... traffic such as VBR and CBR is serviced first: ...

Cited by 4 - [Related articles](#) - [Web Search](#) - [All 3 versions](#)

Traffic shaper with multiply queued virtual paths

K Matsunuma... - US Patent 6,091,708, 2000 - [Google Patents](#)

... The second and third logic circuits 60 and 62 perform combinations of NOT and AND logic. Next the operation of the first embodiment will be described. ...

Cited by 14 - [Related articles](#) - [Web Search](#) - [All 5 versions](#)

Method and apparatus for controlling data transfer rates of sources in ATM networks

FM Chiussi, VP Kumar, C Tryfonas, M Sudhakar - EP Patent 0,782,302, 1997 - [freepatentsonline.com](#)

... more than one congestion indicator is compared to the first and second thresholds. ... maximum transfer rate adjusted as a function of a third variable when ...

[Related articles](#) - [Web Search](#) - [All 3 versions](#)

On Accommodating Mobile Hosts in an Integrated Services Packet Network - [umass.edu](#)

AK Talukdar, BR Badrinath, A Acharya - IEEE INFOCOM, 1997 - [doi.ieeecomputersociety.org](#)

... The third component, congestion delay, arises due to ... The first approach is location dependent: the &OS ... The second approach is location independent: the mobile ...

Cited by 102 - [Related articles](#) - [Web Search](#) - [BI Direct](#) - [All 15 versions](#)

LAN interconnection experiments over a cross country switched multi-megabit data service network

RE Reinoso, P Bellicore - Local Computer Networks, 1992. Proceedings., 17th Conference ..., 1992 - [ieeexplore.ieee.org](#)

... UDP does not have flow or congestion control mechanisms. ... The switch nodes and DS1 trunk have negligible ... the maximum number of packet per second without losing ...

[Related articles](#) - [Web Search](#) - [BI Direct](#)

Method for managing the throughput of digitally coded messages transported through an asynchronous ...

P Dumas, DM Makoua - US Patent 5,430,721, 1995 - [freepatentsonline.com](#)

... distributed in the form of lists, then in a third step 25 ... as soon as a message is delivered after the first processing performed in the second step 2 ...

Cited by 7 - [Related articles](#) - [Web Search](#) - [All 4 versions](#)

ATM cell scheduler

JW Byrn, GS Delp, PL Leichty, BV Patel, KG Plotz, ... - US Patent 5,533,020, 1996 - [freepatentsonline.com](#)

... b. a first device for maintaining the status of each ... c. a second device for evaluating a target transmission time ... d. a third device for generating a signal for ...

Cited by 75 - [Related articles](#) - [Web Search](#) - [All 4 versions](#)

Method for weighted fair queuing for ATM cell scheduling

A Joffe - US Patent 5,014,367, 2000 - Google Patents

... "ATMS2003B Switch Controller 1 ... Beraldi, R., et al: "Selective BECN Schemes for Congestion ... Field of Search 370/230, 232, Flow Control", Computer Communications ...

Cited by 12 - Related articles - Web Search - All 3 versions

Control and scheduling in a two-station queueing network: Optimal policies and heuristics

H Chen, P Yang, DD Yao - Queueing Systems, 1994 - Springer

... Second, even in the Markovian setting, our problem has ... equations is elementary (conditioning on the first jump epoch ... For the third through the fifth terms, if ...

Cited by 34 - Related articles - Web Search - BL Direct - All 3 versions

Comparative performance analysis of directed flow control for real-time SCI - [PDF] ► ufl.edu

RW Todd, MC Chidester, AD George - Computer Networks, 2001 - Elsevier

... The first case study simulates a simple single-priority system to test the ... of effective throughput at high offered loads with TRAIN second and PPO third. ...

Cited by 3 - Related articles - Web Search - Library Search - All 6 versions

Improving the fairness of distributed-queue-dual-bus networks

EL Hahne, AK Choudhury, NF Maxemchuk - INFOCOM'90. Ninth Annual Joint Conference of the IEEE ..., 1990 - IEEE Xplore

... from node 1. When the second file transfer ... 2 is transmitting a message that arrived first), while the ... in order to facilitate congestion-control coordination ...

Cited by 80 - Related articles - Web Search

Phantom: a simple and effective flow control scheme

Y Afeek, Y Mansour, Z Osfeld - Computer Networks, 2000 - Elsevier

... sessions increases the rate of the third session decreases ... First (following the ideas of the TCP window ... Therefore, we employ a second mechanism that monitors ...

Cited by 75 - Related articles - Web Search - BL Direct - All 8 versions

Analysis of a 3D toroidal network for a shared memory architecture

F Pittelli, D Smitley, SR Center, MD Lanham - Supercomputing'88 [Vol. 1]. Proceedings., 1988 - IEEE Xplore

... to initiate a new message every tick Second, the average ... Third, in the absence of hardware failures ... STORE request message from a processor is first injected into ...

Cited by 21 - Related articles - Web Search - Library Search - All 6 versions

Adaptive Sampling for Network Management - [PDF] ► compunet.hn

EA Hernandez, MC Chidester, AD George - Journal of Network and Systems Management, 2001 - Springer

... the minimum input value for rule 3. The third step scales ... The first trace is a two-hour sample taken from the ... A second trace was captured from a port of a Fore ...

Cited by 19 - Related articles - Web Search - Library Search - BL Direct - All 7 versions

METHOD FOR THE CONTROL OF FLOWS WITHIN AN ATM SWITCH WITH DISTRIBUTED ARCHITECTURE

M DELATTRE, M BAVANT, D GUERIN, P HERAU - US Patent App. 09/175,478, 1998 - Google Patents

... OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC FOURTH FLOOR 1755 ... a switch, it begins by crossing a first line card ... card for the cell and then a second line card ...

Cited by 3 - Related articles - Web Search - All 5 versions

[PDF] ► Trac Management for the Available Bit Rate (ABR) Service in Asynchronous Transfer Mode (ATM) ...

S Kalyanaraman - 1997 - ecse.rpi.edu

... Second, we design a set of source end system ... Third, we validate the performance of the service for various ... 156.6.3 Fairshare First to Avoid Transient Overloads ...

Cited by 52 - Related articles - View as HTML - Web Search - Library Search - All 13 versions

Urban Traffic Control: Current Methodologies

G Bruno, G Improta, Università Federico II, ... - Artificial Intelligence Applications to Traffic Engineering, 1994 -

books.google.com

... Finally, in the third step, a set of ... minimize the collective cost (Wardrop's second principle-normative ... pattern which satisfies Wardrop's first principle (desc

Cited by 5 - Related articles - Web Search - Library Search

Pricing in computer networks: motivation, formulation, and example - [PDF] ► stevens.edu

R Cocchi, S Shenker, D Estrin, L Zhang - IEEE/ACM Transactions on Networking (TON), 1993 - portal.acm.org

... Second, this increase in bandwidth, combined with the ... Third, the future traffic control mechanisms, by which we ... We first describe the service discipline and ...

Cited by 382 - Related articles - Web Search - All 16 versions

Method and system for network processor scheduling based on service levels

BM Bass, JL Calvignac, MC Haddes, MS Siegel, FJ ... - US Patent App. 09/834,141, 2001 - Google Patents

... A system and method of moving information units from an output flow control toward a ... unit according to service based on a weighted fair queue where position in ...

Related articles - Web Search - All 4 versions

Adaptive Sampling for Network Management

AD George, MC Chidester, EA Hernandez - 2000 - Storming Media

... used by Jacobson and Karels in the congestion control protocol ... In the table, the first and second columns are correlated using the logic operator AND, which is ...

Related articles - Web Search

Virtual interfaces with dynamic binding

A Harvey, ... - US Patent 6,330,599, 2001 - freepatentsonline.com

... the statistics flags comprise a first flag directing the ... 110 to resent statistics after reporting, a second flag directing ... link 123, and a third flag directing ...

Cited by 18 - Related articles - Web Search - All 6 versions

Label-switching and control interface for asynchronous fast-packet switching

C Demichelis, P Matone, A Zappalorto - US Patent 4,995,032, 1991 - freepatentsonline.com

... The third address of the interface allows the processor ... pulse on wire 307 carries the first useful octet ... RG19, through connection 308 and the second octet on ...

Cited by 4 - Related articles - Web Search - All 5 versions

[PS] ► **A Proposed Bandwidth Management and Congestion Control Scheme for Multicast ATM Networks**

JS Turner, OB Drive - Computer, 1997 - ari.wustl.edu

... First, it should provide consistent performance to those ... Second, it should allow high networkthroughputs even in ... few hundred ofcells.) Third, the specification ...

Cited by 12 - Related articles - View as HTML - Web Search - All 5 versions

[PDF] ► **Integrated Services in the Internet Architecture: an Overview**

S Shenker, ... - IETF Request for Comments (RFC), 1994 - mosteiro.hpg.ig.com.br

... The fourth and final component of our implementation ... First, the value of the offset delay, which is ... Second, the delays of individual packets can decrease the ...

Cited by 153 - Related articles - View as HTML - Web Search - All 252 versions

A merging control system for the urban freeway

D Bushnell - Vehicular Technology, IEEE Transactions on, 1970 - ieeexplore.ieee.org

... The third and most current approach to freeway control is ... A second type of display, which is of interest ... system, the program requires that the first vehicle up ...

Cited by 4 - Related articles - Web Search - Library Search

[PS] ► **Simple Protocol Processing for High-bandwidth Low-latency Networking**

JC Brustoloni, BN Bershad - 1993 - fr.openbsd.org

... In this case, congestion must either be handled with ... a connection's idle period, and the second strategy requires ... hardware, we rely on the third strategy. ...

Cited by 19 - Related articles - View as HTML - Web Search - Library Search - All 11 versions

System and method of scheduling data cells based upon sustainable cell rate and peak cell rate over ...

RC Lewis, HM Mahler - US Patent 6,285,657, 2001 - freepatentsonline.com

... The first data cell transmitted is R-1, possibly because VC -- 3 614 has a ... The second data cell transmitted is P-1 of VC -- 2 612; the third data cell ...

[Cited by 3](#) - [Related articles](#) - [Web Search](#) - [All 3 versions](#)

Overview of a Broad-Band Local Area Network Protocol Architecture

G Ennis, P Filice, I Sylek, CA Mountain View - Selected Areas in Communications, IEEE Journal on, 1993 - ieeexplore.ieee.org

... device essentially provides a packet switch between channels ... The flow control function is handled via a "window ... ready for transmission will first listen to the ...

[Cited by 11](#) - [Related articles](#) - [Web Search](#) - [All 3 versions](#)

Perturbation analytic methodologies for design and optimization of communication networks

CG Cassandras, SG Strickland - Selected Areas in Communications, IEEE Journal on, 1988 - ieeexplore.ieee.org

... IV, we investigate the effect of introducing flow control mechanisms ... packet, do = 0 and a first-come-first-serve (FCFS ... dk we evaluate 6dk from the second case in ...

[Cited by 11](#) - [Related articles](#) - [Web Search](#) - [All 4 versions](#)

Guest Editors' Prologue--Scanning the Issue

G Bergland, R Cheung - Communications, IEEE Transactions on [legacy, pre-1988], 1982 - ieeexplore.ieee.org

... The third paper of this section, "CHILL-The Standard ... The first paper in this section is entitled ... The second paper, "A Meta-Implementation for Systems ...

[Web Search](#)

[PS] ► Algebraic specification of a system for traffic regulation at signalized intersections

SFM van Vlijmen, A van Waveren - 1993 - science.uva.nl

... new order: why not the fourth order? In the following, first, second and third order realizations are defined more precisely. This is ...

[Cited by 2](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [All 7 versions](#)

Method and apparatus for minimizing network congestion during large payload delivery

SY Sim, DCH Chan - US Patent App 09/681,668, 2001 - Google Patents

... 27,2002 (54) METHOD AND APPARATUS FOR MINIMIZING NETWORK CONGESTION DURING LARGE PAYLOAD DELIVERY (76) Inventors: Siew Yong Sim, Cupertino, CA (US); Desmond Cho ...

[Related articles](#) - [Web Search](#) - [All 4 versions](#)

Internet security attacks at the basic levels

M de Vivo, O Gabriela, G Isern - ACM SIGOPS Operating Systems Review, 1998 - portal.acm.org

... to issues like packet routing and congestion avoidance ... hostb.net2.com), it must use the DNS first to obtain ... to dedicate local loops to the switch (hub) fox ...

[Cited by 34](#) - [Related articles](#) - [Web Search](#) - [BL Direct](#) - [All 3 versions](#)

[PDF] ► Advanced Coordinated Traffic Responsive Ramp Metering Strategies

K Bogenberger, D Adolf, California, Institute of ... - 1999 - path.berkeley.edu

... Fuzzy logic metering was first initiated in 1989 ... improved robustness, prevented heavy congestion, intelligently balanced ... measured at 20-second intervals (except ...

[Cited by 29](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [Library Search](#) - [All 5 versions](#)

Supporting rate guarantee and fair access for bursty data traffic in W-CDMA

AC Karn, T Minn, KY Siu - IEEE Journal on Selected Areas in Communications, 2001 - doi.ieeeecomputersociety.org

... the algorithms conform to the proposed third-generation W ... some sense not "work conserving." The first reason is ... The second reason is that for the purpose of ...

[Cited by 43](#) - [Related articles](#) - [Web Search](#) - [BL Direct](#) - [All 6 versions](#)

Volume 2, Number 1 (January 1972)

V Cert - International Conference on Computer, 1971 - portal.acm.org

... The first SIGCOMM Newsletter ... Second Symposium on Data Communications-- Preview ...

Communication; L. Kleinrock • Highlights of the Third Data Communications ...

Web Search

Concept definition of traffic flow wide-area surveillance

GO Allgood, RK Ferrell, SW Kerrel - 1994 - osti.gov

... Its third function is to provide information to route ... First, the sensor suite selection must take into ... Second, to the extent practicable, the TFWAS system ...

Cited by 1 - Related articles - View as HTML - Web Search - Library Search

Time-Sharing Parallel Jobs in the Presence of Multiple Resource Requirements -

[PDF] ► lanl.gov

F Petrini, W Feng - LECTURE NOTES IN COMPUTER SCIENCE, 2000 - Springer

... A second dimension is the selection algorithm of the ... with the expected start time of the first job in ... set the delay associated with job context-switch at the ...

Cited by 11 - Related articles - Web Search - BL Direct - All 10 versions

[PDF] ► Applications of Game Theory in Ad Hoc Networks

J Leino - IEEE/ACM Transactions on Networking, 1999 - netlab.hut.fi

... Second, we model the interaction between ... In strategic games, the players first make their decisions and then the outcome of ... There is also a third Nash ...

Cited by 6 - Related articles - View as HTML - Web Search - Library Search - All 10 versions

Fast deflection routing for packets and worms

A Bar-Noy, P Raghavan, B Schieber, H Tamaki - Proceedings of the twelfth annual ACM symposium on ..., 1993 - portal.acm.org

... packets, the first such result for deflection routing. ... However, due to congestion, two or more messages may arrive ... placed on a queue of messages wishing to use ...

Cited by 56 - Related articles - Web Search - BL Direct - All 2 versions

[PDF] ► An Analytic Model for ATM Network Performance and its Application to BSP

E Karimi, DB Skillicorn - 1997 - qucis.queensu.ca

... operations called steps that they execute each second. ... of high-bandwidth, exible, switch-based network ... the protocol stack, latency, congestion, and message ...

Related articles - View as HTML - Web Search - All 7 versions

The Parctab Ubiquitous Computing Experiment - [PDF] ► googlepages.com

R Want, BN Schilit, Ni Adams, R Gold, K Petersen, ... - KLUWER INTERNATIONAL SERIES IN ENGINEERING AND COMPUTER ..., 1996 - Springer

... reduced to one-third of its current weight and ... The first presents key icons across lines 2 through 8 of ... could enter about two characters per second using this ...

Cited by 408 - Related articles - Web Search - BL Direct - All 43 versions

Method and apparatus for initializing a new node in a network

SY Sim, DCH Chan - US Patent App. 09/681,671, 2001 - Google Patents

Page 1, US 20030046369A1 (19) United States (12) Patent Application Publication

(10) Pub. NO.: US 2003/0046369 A1 Sim et al. (43) Pub. Date: Mar. ...

Cited by 3 - Related articles - Web Search - All 4 versions

Two-moment models for the performance evaluation of B-ISDN networks

A Girard, H Bouley - Telecommunication Systems, 1994 - Springer

... the link loading stage, and a third section shows ... The second stage of the link decomposition method for ... i,j First, we recall the procedure for one-moment models ...

Cited by 2 - Related articles - Web Search

An Open Implementation Toolkit for Creating Adaptable Distributed Applications

JP Loyal - 2001 - Storming Media

... The first part deals with the constructs needed to ... The second part deals with providing runtime middleware to ... The third part deals with the inserting the ...

Related articles - Web Search - Library Search - All 4 versions

Method and apparatus for managing a plurality of servers in a content delivery network

SY Sim - US Patent App. 09/681,669, 2001 - Google Patents

Page 1. US 20020083118A1 (19) United States (12) Patent Application Publication

(io> Pub. NO.: US 2002/0083118 AI Sim (43) Pub. Date: Jun. ...

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Method and apparatus for distributing large payload file to a plurality of storage devices in a ...

SY Sim - US Patent App. 09/681,665, 2001 - Google Patents

Page 1. US 20030031176A1 (19) United States (12) Patent Application Publication

(io> Pub. NO.: US 2003/0031176 AI Sim (43) Pub. Date: Feb. ...

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Method and apparatus for an incremental editor technology

PH McCann, GL Alose, JE Chavez, SM Dawson, RS ... - US Patent 5,963,939, 1999 - [freepatentsonline.com](#)

... different divisions of the manufacturer or third party ... summary, although the analysis of the first instance of ... need at least 100 characters per second") and the ...

[Cited by 7](#) - [Related articles](#) - [Web Search](#) - [All 3 versions](#)

Scheduled routing for the NuMesh - [pdf] ► [mit.edu](#)

MS Minsky - 1994 - [dspace.mit.edu](#)

... Detecting and avoiding network congestion at compile time for ... This second strategy is more common in real time ... all messages are routed this way: first in x ...

[Cited by 6](#) - [Related articles](#) - [Web Search](#) - [Library Search](#) - [All 4 versions](#)

[PDF] ► CONFIGURABLE FAULT-TOLERANT DISTRIBUTED SERVICES

MA Hiltunen - Department of Computer Science, University of Arizona, ..., 1996 - [historical.ncstrl.org](#)

... 78 4.4 FIFO Order : : : : ... 4.7 Agreement on First Message : : : : ...

[Cited by 11](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [All 8 versions](#)

The offset cube: a three-dimensional multicomputer network topology using through-wafer optics

WS Lacy, JL Cruz-Rivera, DS Wills - Transactions on Parallel and Distributed Systems, 1998 - [ieeexplore.ieee.org](#)

... interconnects must be provided in the third dimension as ... the offset cube network by first de-scribing ... a greater number of I/Os for flow control and synchroniza ...

[Cited by 11](#) - [Related articles](#) - [Web Search](#) - [BL Direct](#) - [All 7 versions](#)

[PS] ► Wireless Network Multicasting

CC Chiang - 1998 - [cs.ucla.edu](#)

... 129 7.2 Quality of Service (QoS) and RSVP 129 7.3

Wireless Multicast Flow Control 129 ...

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Implicit coscheduling: coordinated scheduling with implicit information in distributed systems -

[pdf] ► [berkeley.edu](#)

AC Apaci-Dusseau - ACM Transactions on Computer Systems (TOCS), 2001 - [portal.acm.org](#)

... Third, the process can use two-phase waiting ... First, all timer events occur independently across processors (eg ... 10ms clock tick and the one-second update timer ...

[Cited by 63](#) - [Related articles](#) - [Web Search](#) - [Library Search](#) - [BL Direct](#) - [All 9 versions](#)

[PS] ► Design and performance evaluation of multiple-access protocols for ATM-based passive optical ...

FJM Parken - 1997 - [cs.ru.nl](#)

... 5 Performance analysis of the global FIFO multiple-access protocol ... 9.4 Call congestion due to a PON ... First of all, I thank my co-promoter and supervisor Chris ...

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Ant Algorithms for Discrete Optimization - [pdf] ► [liend.com](#)

M Dorigo, GD Caro, LM Gambardella - Artificial Life, 1999 - MIT Press

... In the first part of the article the basic biological findings on real ants are ... In

the second part of the article a number of applications of ACO algorithms to ...

[Cited by 948](#) - [Related articles](#) - [Web Search](#) - [BL Direct](#) - [All 17 versions](#)

[PS] ► [Multicomputer Routing Techniques](#)

M Fulgham - 1997 - [cs.washington.edu](#)

... perhaps, the maximum queue size needed at any node can be determined. ... First, they use areasonablenum- ... Second, they make decisions based on local information ...

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[Gateway to 21st Century Communications Village. VTC 1999-Fall. IEEEVTS 50th Vehicular Technology ...](#)

E. Courses, T Surveys - Vehicular Technology Conference, 1999. VTC 1999-Fall. IEEE ..., 1999 - [ieeexplore.ieee.org](#)

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[BOOK] [Spread Spectrum in Mobile Communication](#)

O Berg - 1998 - [books.google.com](#)

... ix 5.6.1 Relaying 385 5.6.2 Retransmission 389 5.6.3 Flow control 390 5.7 ... Fast Fourier transform FH(SS) Frequency hopping (spread spectrum) FIFO First in first ...

[Cited by 16](#) - [Related articles](#) - [Web Search](#) - [Library Search](#) - [BL Direct](#) - [All 3 versions](#)

[IEEE VTS 50th vehicular technology conference](#)

E. Courses, T Surveys - Vehicular Technology Conference, 1999. VTC 1999-Fall. IEEE ..., 1999 - [ieeexplore.ieee.org](#)

... got the opportunity to host the first VEHICULAR TECHNOLOGY ... the imminent introduction of third generation personal ... to attend the Second International Symposium ...

[Web Search](#) - [All 2 versions](#)

[BOOK] [Planning and Architectural Design of Integrated Services Digital Networks: Civil and Military ...](#)

AN Ince, D Wilhelmisen, B Sankur - 1995 - [books.google.com](#)

... COMPRESSION, Allen Gersho, Robert M. Gray ISBN: 0-7923-9181-0 THIRD GENERATION WIRELESS ... goes back to the start of the alliance, and in the first decades it was ...

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LM Gambardella, M Dorigo - Artificial Life, 1999 - MIT Press

... In the first part of the article the basic biological findings on real ants are ... In the second part of the article a number of applications of ACO algorithms to ...

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TR IRIDIA, M Dorigo, G Di Caro, LM Gambardella - To appear in Artificial Life, 1999 - [iro.umontreal.ca](#)

... In the first part of the paper the basic biological findings on real ants are ... In the second part of the paper a number of applications to combinatorial ...

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Key authors: [S Shenker](#) - [A Talukdar](#) - [E Hahne](#) - [Y Afek](#) - [R Cocchi](#)

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